



ELSEVIER

Contents lists available at ScienceDirect

## Data in brief

journal homepage: [www.elsevier.com/locate/dib](http://www.elsevier.com/locate/dib)



### Data Article

# Data of the impact of Aligning Business, IT, and Marketing Strategies on Firm Performance

Abdulrahman Al-Surmi\*, Guangming Cao, Yanqing Duan

Business School, University of Bedfordshire, Luton, United Kingdom



#### ARTICLE INFO

##### Article history:

Received 16 April 2019

Received in revised form 23 September 2019

Accepted 7 October 2019

Available online 15 October 2019

##### Keywords:

Strategic alignment

Firm performance

Questionnaire survey

Quantitative analysis

#### ABSTRACT

The data presented in this article are related to the research article entitled "The Impact of Aligning Business, IT, and Marketing Strategies on Firm Performance" [1]. In order to succeed in today's competitive business environment, a firm should have a clear business strategy that is supported by other organizational strategies. While prior studies argue that strategic alignment enhances firm performance, either strategic alignment including multiple factors or strategic orientation of firms has received little attention. This study, drawing on contingency theory and configuration theory, investigates the performance impact of triadic strategic alignment among business, IT, and marketing strategies while simultaneously considers strategic orientation of firms. A research model is tested through SEM and MANOVA using data collected in a questionnaire survey of 242 Yemen managers. The findings indicate that (1) triadic strategic alignment has a positive impact on firm performance and (2) there is an ideal triadic strategic alignment for prospectors and defenders. This research contributes to strategic alignment literature and managers' understanding of how to align business, IT and marketing strategies to improve firm performance.

© 2019 Published by Elsevier Inc. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

DOI of original article: <https://doi.org/10.1016/j.indmarman.2019.04.002>.

\* Corresponding author.

E-mail address: [dr.alsurmi@gmail.com](mailto:dr.alsurmi@gmail.com) (A. Al-Surmi).

<https://doi.org/10.1016/j.dib.2019.104656>

2352-3409/© 2019 Published by Elsevier Inc. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

Specifications Table

Subject area	Strategy and Management
More specific subject area	Business, IT, Marketing, Strategic Orientations, Strategic Alignment, Organizational Performance
Type of data	Tables and figure
How data was acquired	Data were collected through questionnaire
Data format	Raw, analyzed, Inferential statistical data
Experimental factors	Sample consisted of 242 managers of some companies
Experimental features	The data was collected using self-administrated questionnaire in Yemen from 350 firm
Data source location	Sana'a, Yemen
Data accessibility	<a href="https://doi.org/10.17632/pp8j9jtsyz.2">https://doi.org/10.17632/pp8j9jtsyz.2</a>
Related research article	Al-Surmi, A., Cao, G., Duan, Y., 2019. The Impact of Aligning Business, IT, and Marketing Strategies on Firm Performance. <i>Industrial Marketing Management</i> . (In Press) [1].

**Value of the Data**

- The data presented will enable company's management to have proper understanding and better insights into how triadic strategic alignment impacts on organizational performance
- The data provides insights into diverse aspects of strategic alignment in general.
- Academics will be provided with a platform upon which to advance further research on the related subject matters

**1. Data**

The sampling frame contains 1201 firms of private and public firms ranging from small to large size. Firms that do not satisfy the requirements of conducting the research were removed from the list leading to a sample frame of 700 firms.

Firms selection follows a systematic sampling procedure by picking a firm randomly from a list using Excel [2]. This led to the selection of 350 firms chosen randomly using Excel in an attempt to obtain a sample that appears to be representative of the population.

We had 242 analyzable questionnaires returned from the 350 distributed questionnaires. Numerical data consisting of categorical and seven point Likert scale were analyzed and appear in Tables 1, 4–8. The following methods of analysis were employed: Descriptive and One-way MANOVA analyses were computed using Statistical Package for Social Sciences (SPSS) of which computes complicated statistical techniques more easily [3]. Furthermore, the seven point Likert scale data were also used in constructing SEM (Fig. 1) based on the analyzed data shown in Tables 2–3 to visually present the relationship strength between variables tested. This Structural Equation Modelling (SEM) analysis was performed using Partial Least Square (SmartPLS). This software was used because it handles both formative and reflective measurement models which deemed appropriate for theory development [4].

**Table 1**  
Respondents' profiles (n = 242).

Firm Profile	Percentage (%)
Industry	
Telecom	29.8
Banking and Finance	25.2
Manufacturing	11.2
Retail	5.8
Service	4.1
Property	3.7
Other	20.2

**Table 2**  
Reflective measurement model.

	Reflective First-order Constructs	Manifest Indicators	Outer Loadings	Indicator Reliability	AVE	Composite Reliability	Cronbach's $\alpha$
Business Strategic Orientation (BSO)	Proactiveness	PRO1	0.73	0.50	0.51	0.75	0.51
		PRO2	0.70	0.51			
		PRO3	0.71	0.51			
	Defensiveness	DEF1	0.81	0.65	0.61	0.82	0.67
		DEF2	0.83	0.70			
		DEF3	0.69	0.48			
	Analysis	ANA1	0.80	0.65	0.69	0.87	0.78
		ANA2	0.85	0.71			
		ANA3	0.85	0.73			
IT Strategic Orientation (ITSO)	Flexibility	FLEX1	0.66	0.40	0.64	0.84	0.72
		FLEX2	0.85	0.74			
		FLEX3	0.87	0.77			
	Efficiency	EFF1	0.80	0.66	0.66	0.85	0.74
		EFF2	0.85	0.71			
		EFF3	0.77	0.60			
	Comprehensiveness	COMPR1	0.88	0.77	0.71	0.88	0.79
		COMPR2	0.89	0.78			
		COMPR3	0.75	0.58			
Marketing Strategic Orientation (MSO)	Customer-focused	CUS1	0.76	0.58	0.57	0.87	0.81
		CUS2	0.80	0.64			
		CUS3	0.79	0.62			
		CUS4	0.63	0.40			
		CUS5	0.78	0.60			
	Competitor-focused	COMP1	0.78	0.61	0.65	0.88	0.82
		COMP2	0.85	0.72			
		COMP3	0.86	0.73			
		COMP4	0.73	0.54			
Organizational Performance	Performance	PERF1	0.90	0.82	0.75	0.94	0.92
		PERF2	0.88	0.77			
		PERF3	0.81	0.66			

**Table 3**

Control variables.

Variable	Research Model (a)		Control Variable Model (b)	
	Path Coefficients	t-value	Path Coefficients	t-value
<b>Independent Variables</b>				
PRO -> BSO	0.299	3.297***	0.316	3.294**
DEF -> BSO	0.516	5.623***	0.534	5.566***
ANA -> BSO	0.471	3.951***	0.439	4.089***
FLEX -> ITSO	0.370	4.197***	0.372	3.977***
EFF -> ITSO	0.122	3.312***	0.124	0.994 <sup>ns</sup>
COMPR -> ITSO	0.643	6.394***	0.640	6.548***
CUS -> MSO	0.512	3.822***	0.494	4.048***
COMP -> MSO	0.575	4.905***	0.593	5.126***
TSA -> PERF	0.592	13.374***	0.583	12.601***
<b>Control Variables</b>				
SIZE -> PERF			0.074	1.610 <sup>ns</sup>
INDUSTRY -> PERF			-0.066	1.340 <sup>ns</sup>
JOB -> PERF			0.071	1.533 <sup>ns</sup>
$R^2$ Value for PERF $R^2 = 0.365_b - 0.350_a = 0.015^{***}$				

\*\*\*p < 0.001, \*\*p < 0.01, \*p < 0.05, <sup>ns</sup> -not significant.**Table 4**

Descriptive Statistics (Prospector, n = 28).

Modes	No	Market share		Net profit		Financial liquidity	
		Mean	S.D.	Mean	S.D.	Mean	S.D.
Ideal	14	5.36	1.151	5.57	0.852	5.50	0.941
Medium	12	4.33	1.231	4.08	1.165	4.17	1.403
Low	2	3.00	2.828	2.50	2.121	2.5	2.121

**Table 5**

Tests of between-subject effects for prospector.

Dependent Variable	F	Sig.	Partial Eta Squared
Net Profit	10.777	.000	.463
Financial Liquidity	7.317	.003	.369
Market Share	3.990	.031	.242

**Table 6**

Descriptive Statistics (Defender, n = 41).

Modes	No	Market share		Net profit		Financial liquidity	
		Mean	S.D.	Mean	S.D.	Mean	S.D.
Ideal	21	5.95	1.117	5.38	1.244	5.67	1.155
Medium	18	4.22	0.943	3.89	1.183	3.83	1.098
Low	2	6.00	1.414	6.00	1.414	6.00	1.414

**Table 7**

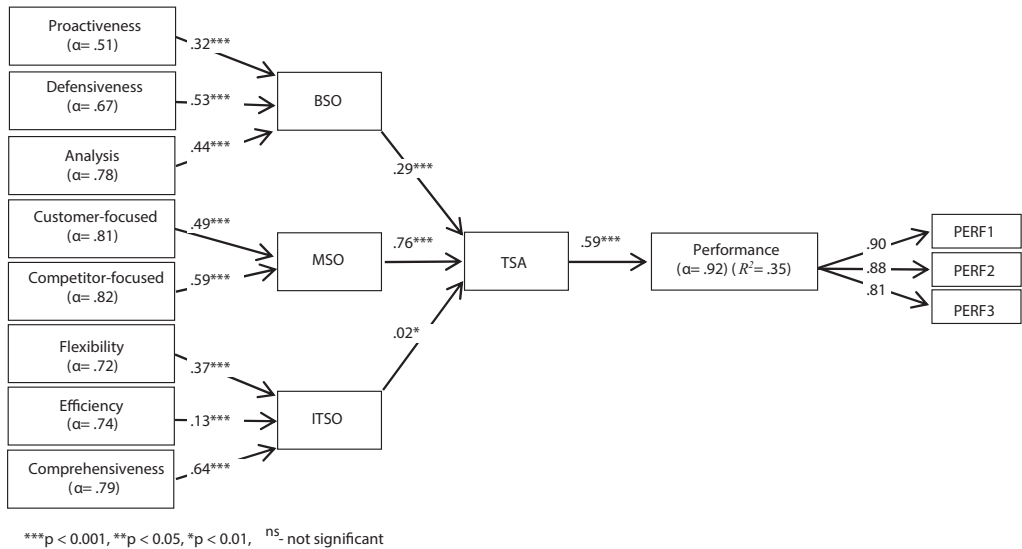
Tests of between-subject effects for defenders.

Dependent Variable	F	Sig.	Partial Eta Squared
Net Profit	8.316	.001	0.304
Financial Liquidity	13.612	.000	0.417
Market Share	13.721	.000	0.419

**Table 8**

Descriptive Statistics (Analyzer, n = 127).

Modes	No	Market share		Net profit		Financial liquidity	
		Mean	S.D.	Mean	S.D.	Mean	S.D.
Ideal	92	5.18	1.089	4.99	1.209	5.22	1.239
Medium	35	4.86	1.556	4.86	1.556	4.83	1.339

**Fig. 1.** Structural equation model.

## 2. Experimental design, materials, and methods

### 2.1. Data collection

The data were collected on a single trip to Sana'a during the summer period of 2014 by distributing the questionnaires to managers using self-administrated paper questionnaires in a cross sectional survey research approach [2]. The survey instrument appears in Supplementary Material.

### 2.2. Data analysis

Data collected were organized, coded and entered into SmartPLS and SPSS for analysis. Our data analysis primarily utilizes partial least square analysis of Likert scale. This was used in assessing the reflective and formative measurements in terms of composite reliability, convergent validity, and internal consistency reliability as shown in Table 1. The PLS estimations for the structural model, path coefficients values as well as the item loadings for the research constructs are shown in Fig. 1 and Tables 2–3. Tables 4–8 are the analyses of Likert scale using One-way MANOVA analytical technique to assess the different modes of triadic strategic alignment.

### Conflict of Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

## Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.dib.2019.104656>.

## References

- [1] A. Al-Surmi, G. Cao, Y. Duan, The Impact of Aligning Business, IT, and Marketing Strategies on Firm Performance, *Industrial Marketing Management*, 2019, <https://doi.org/10.1016/j.indmarman.2019.04.002>.
- [2] M.N.K. Saunders, P. Lewis, A. Thornhill, *Research Methods for Business Students*, eighth ed., Pearson Education, 2019.
- [3] P.R. Hinton, I. McMurray, C. Brownlow, *SPSS Explained*, Taylor & Francis, 2014.
- [4] J.F. Hair, G.T.M. Hult, C. Ringle, M. Sarstedt, *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*, SAGE Publications, 2013.